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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/500,042

06/23/2004

Syuushi Nomura

042449

5201

38834

7590

12/01/2006

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EXAMINER

SOOHOO, TONY GLEN

ART UNIT

PAPER NUMBER

1723

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/500,042

Applicant(s)

NOMURA ET AL.

Examiner

Tony G. Soohoo

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1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6-04 &amp; 5-05</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No.

PCT/JP02/13473, filed on 12/24/2002. ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 14-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims 14-15 claims a naturally occurring fluid of water. There is no structural distinction to the structure of the water as presently claimed. The recitation of the passing of the fluid (water) thorough the apparatus does point out or provide any indication of a structural change to the makeup of water.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Independent claim 1 has a phrase in parentheses which renders unclear if the phrase is meant to be included as a positive requirement in the claim (or merely a non-limiting aside discussion).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mortus 3747656.

The Mortus reference discloses a single material piece having an eternal shape of an hexagonal prism and having an annular hole 12, internal spiral groove thread of a triangular shape and made of a metal.

With regards to claim 1, the Mortus reference discloses all of the recited subject matter as defined within the scope of the claims with the exception of having

- (1) plural material pieces,
- (2) being made of the metals (SUS304 stainless steel, claim 6) or diamond (claim 1, line 8),
- (3) being heat treated,
- (4) being arranged in a with the openings parallel to one another (i.e. lying in the same direction), and
- (5) being retained (i.e. held in a box for example).

With regards to the 1st issue, it is noted that nuts are commonly sold in plural pieces since fasteners are used in multiple places to hold a housing together.

Accordingly, it is deemed that it would have been obvious to one of ordinary skill in the

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art to provide plural locknuts to be sold together for reasons of convenience and lower costs of manufacture and sales. Also, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

With regards to the 2<sup>nd</sup> issue, it is noted that stainless steel is a common material used for locknuts and the use of stainless steel exhibits a desirable property of resistance to rusting. Also, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In *re Leshin*, 125 USPQ 416. Accordingly, it is deemed that it would have been obvious to one of ordinary skill in the art to substitute for the metal material of the Mortus locknut with a stainless steel material such as the known SUS304 stainless steel material so that it would exhibit a resistance to rusting.

With regards to the 3<sup>rd</sup> issue, the treatment of the material piece is directed to the method of manufacture, thereby may be argued that does not structurally define the device itself. Nonetheless, it is an old and well known technique to heat treat metals to provide a greater structural strength. Accordingly, it is deemed that it would have been obvious to one of ordinary skill in the art to heat treat the metal of the locknut so as to alter the material characteristic in order to provide a greater material strength of the nut.

With regards to the 4<sup>th</sup> issue and 5<sup>th</sup> issue, the planar arrangement and retaining of the plural material pieces (locknuts), it is an old and well known technique to put nuts into a box and to arrange them relatively flat so as to provide a more efficient filling of the box. Accordingly, it is deemed that it would have been obvious to one of ordinary

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skill in the art to provide a box to retain the locknuts for sale, and to arrange the locknuts in a flat manner with the holes in parallel axial arrangement so as to optimize the amount of locknuts to fit into the box for sale.

With regards to claim 3, the absent any unexpected result, the arrangement of the locknut in the box to form a particular shape so as to provide a more effective and space efficient positioning is deemed obvious. It has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Accordingly, absent any showing of unexpected result, it is deemed that it would have been obvious to one of ordinary skill in the art to rearrange the locknuts of Mortus to a hexagonal form to provide a space efficient grouping of the locknuts

With regards to claims 4-5, whereby the filed converts are piled on top of one another. It is an old and well known technique to stack boxes on top of one another to provide an efficient manner to store boxes for sale upon a self. Accordingly, it is deemed that it would have been obvious to one of ordinary skill in the art to provide plural boxes of the locknuts in a piled stacked manner in order to provide an efficient storage while awaiting sale.

With regards to claim 8, the size and height of locknuts are commonly known to be provided in different sizes to fit an corresponding threaded fastener. Accordingly, it is deemed that it would have been obvious to one of ordinary skill in the art to change the size of the locknut of Mortus to a size as recited by the claim so as to fit a respective size threaded bolt.

With regards to claim 11, it is noted that a storage room or warehouse has doors and windows which are provide an inlet and outlet and walls which provide as a container in which to store boxes of locknuts in an environmentally controlled environment. Accordingly, it is deemed that it would have been obvious to one of ordinary skill in the art to provide for the boxes of locknuts of the Mortus reference with a storage room or warehouse to provide a more advantageously controlled environment to hold the locknuts prior to sale.

***Allowable Subject Matter***

7. Claims 12-13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

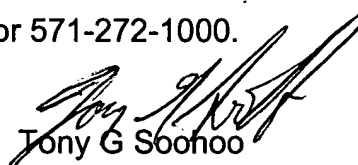
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. King 4208136, Thomas 3089683, Kamilos et al 4811786, Kojima 5605400, Shearer, kowosinski et al 4806288 .

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G. Soohoo whose telephone number is (571) 272 1147. The examiner can normally be reached on 8AM-5PM, Tue-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Tony G Soohoo  
Primary Examiner  
Art Unit 1723

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**TONY G. SOOHOO**  
**PRIMARY EXAMINER**